

**REMARKS**

The present amendment is in response to the Office Action mailed on Feb. 24, 2006, in which Claims 1-20 were rejected. Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action and, when coupled with the above amendments, are believed to render the claims at issue patentable.

Claims 1, 9 and 19 are amended, and Claims 7-8 are canceled. The Applicant submits that no new matter has been added and that the originally filed specification, drawings, and claims support the amendments.

[1] Claims 5, 14 and 19-20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is amended to clearly point out the notebook/tablet dual-purpose computer can play the optical disk content on the liquid crystal display that is mounted on the display shelf.

The Applicant respectfully traverses the rejection of Claims 5 and 14. Some optical disk drives, especially optical disk drives for desktop computers, can be directly controlled by buttons (such as the play button, stop button, and fast forward button) disposed on the front panel of the optical disk drive. Although the conventional optical disk drive of a notebook computer normally has no such buttons, due to the requirement for a slim body, the electronic circuits of the optical disk drives for desktop computers can still work on the optical disk drive of a notebook computer.

The Examiner is believed to be correct in stating that a conventional laptop uses the CPU while playing a video disk. However, a CPU is clearly not *needed* for playing a video, because an ordinary dedicated DVD player or CD player lacks a CPU but still works. Thus, the CPU *can* be shut off and a disk still play, if only the power supply, screen, and speaker are working.

The specification at page 9, line 5, explicitly states that the CPU does not need to be turned on.

The Applicant adopts the buttons disposed on the liquid crystal display to directly control the optical disk drive while the notebook/tablet dual-purpose computer is switched to a slate mode. Therefore, the buttons are switched to electrically connect to the electronic circuits of the optical disk drive and the optical disk drive can be directly controlled by the buttons disposed on the liquid crystal display. Accordingly, the control buttons can directly control the optical disk drive while a central processing unit of the notebook/tablet dual-purpose computer is turned off.

Withdrawal of the rejection is respectfully requested.

[2-3] Claims 1-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Saarinen (US 6,882,335B2) in view of Itoh (US 20020041753A1). The Applicant respectfully traverses these rejections.

**Claim 1.** Claim 1 is amended to recite a specific mode “while the liquid crystal display is turned about 180 degrees and closed on the computer base to expose the liquid crystal display.” The Examiner is invited to note in Fig. 1 the rotation shaft 130 that allows this rotation (page 7, lines 1-2), which is provided so that viewers around the unit can see the screen (page 2, lines 6-8). The display also rotates about a second axis, so that the laptop can fold up.

If the display is first rotated 180° from its laptop position, seen in Fig. 1, and then closed against the computer body, the orientation of Fig. 2 results. But now the keyboard (the usual control for playing disks) is inaccessible (this problem is noted page 2, lines 10-18). The Applicant solves this problem; the prior art neither suggests nor solves the problem.

**Saarinen.** With particular reference to US 6,882,335B2, Saarinen discloses a display apparatus including a display and an orientation sensitive interface mechanism. Referring to line 45 of col. 11 to line 9 of col. 12 in the specification and Figs. 2, 6, and 7 of US 6,882,335B2, Display 68 includes within its associated display driver, a portrait/landscape (P/L) detector 68a.

P/L detector 68a is configured to receive display mode control signals from the MDA controller or embedded within a display control signal forwarded to the display driver. For example, a local software application such as a diary/scheduler application, referred to above, may include a control signal to configure the display mode in accordance with the diary mode which has been selected by a user.

P/L detector 68a also outputs a P/L switching signal 44 to switch 46 in order to configure the speakers in accordance with the expected physical orientation in which a user would place the MDA for the display mode to be utilized. Thus, not only can a display mode be automatically adjusted in accordance with an image to be displayed, but the speaker configuration may be correspondingly adjusted in order to maintain the stereo base for a user of the MDA 60 for any sound that may accompany the displayed image.

Therefore, the P/L detector 68a is utilized to receive display mode control signals from the MDA controller or embedded within a display control signal forwarded to the display driver and outputs a P/L switching signal 44 to switch 46 in order to configure the speakers in accordance with the expected physical orientation.

However, the present application discloses a liquid crystal display with optical disk drive control functions for a notebook/tablet dual-purpose computer. The liquid crystal display includes a liquid crystal display panel for displaying contents of an optical disk playing in an optical disk drive, a plurality of control buttons disposed on the liquid crystal display to control the optical disk drive, and an option determining device. In addition, the option determining device further comprises an option controller and an option inductor, the option controller and the option inductor disposed on the liquid crystal display and a computer base of the notebook/tablet dual-purpose computer. The option controller and the option inductor determine the predetermined working function of the liquid crystal display and set the operation functions of the control buttons while the liquid crystal display is turned about 180 degrees and closed on

the computer base to expose the liquid crystal display (referr to FIG. 1 and 2). Accordingly, the function of the option determining device of the present application is different from that of the P/L detector of Saarinen.

**Two Modes.** The function of the option determining device is utilized to determine whether the liquid crystal display of the notebook/tablet dual-purpose computer is under (1) a laptop mode or (2) a slate mode, and set the operation functions of the control buttons.

Therefore, the Applicant's option determining device has to detect whether or not the liquid crystal display is closed on the computer base. Hence, the option determining device includes an option controller and an option inductor. The option controller and the option inductor (disposed on the liquid crystal display and computer base of the notebook/tablet dual-purpose computer) determine the predetermined working function of the liquid crystal display and set the operation functions of the control buttons when the liquid crystal display is turned about 180 degrees and closed on the computer base to expose the liquid crystal display, that is, the notebook/tablet dual-purpose computer is under the slate mode.

To particularly point out the feature of the present application, claim 1 is amended to add the limitations of original claims 7-8, and claims 7-8 are canceled.

Because the option determining device includes an option controller and an option inductor disposed on the liquid crystal display and the computer base of the notebook/tablet dual-purpose computer, the claimed structure of the option determining device is also different from that of the cited reference. Furthermore, the P/L detector of Saarinen cannot implement the function of the option determining device of the present application.

**Itoh.** With reference to US 2002/0041753 A1, Itoh discloses an image processing apparatus that reads out and outputs image information recorded in a recording medium. The image processing apparatus includes a read device, a display device, a selection device through which image information among the image information displayed can be freely selected, an

output device that outputs image information selected by the selection device, and a control device that implements control to ensure that image information read out by the read device is not provided to the display device while image information is being output by the output device.

**Features Not Disclosed.** Both of Saarinen and Itoh fail to teach or suggest utilizing an option determining device with an option controller and an option inductor disposed on the liquid crystal display and the computer base to determine the working function of the liquid crystal display and set operation functions of the control buttons for the liquid crystal display of the notebook/tablet dual-purpose computer.

In addition, since both Saarinen and Itoh fail to disclose utilizing an option determining device with an option controller and an option inductor disposed on the liquid crystal display and the computer base in a notebook/tablet dual-purpose computer, they provide no motivation to detect whether the liquid crystal display is closed on the computer base computer, do not suggest an option controller and option inductor, and do not suggest setting the operation functions of the control buttons according to whether the notebook/tablet dual-purpose computer is under the slate mode or not.

Accordingly, it is submitted that the independent Claims 1, 11 and 18 are not obvious in view of cited references and are allowable over the cited references. In addition, claims 2-6, 9-10, 12-17 and 19-20 depend on claims 1, 11 and 18 respectively, and, adding further limitations thereto, are also allowable over the cited references.

**Detector.** The Examiner asserts that Saarinen's tilt and acceleration sensors are equivalent to the claimed reed switch and magnet switch, just because they are all sensors (page 4, lines 1-3). With respect, sensors that detect different quantities are not equivalent; a thermostat in an oven is not equivalent to a motion detector in a burglar alarm, just because they are both sensors. Likewise, the tilt and acceleration sensors of Saarinen do not anticipate

proximity sensors, any more than a thermometer inherently suggests a barometer—they respond to different physical quantities.

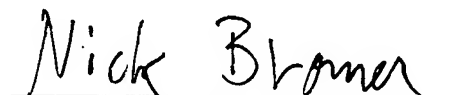
Of the references, only Itoh discloses a laptop/palmtop cover, and this reference does not disclose sensors. Neither reference discloses proximity or position sensors.<sup>1</sup>

**Location.** The Applicant's claimed "display ... turned about 180 degrees and closed on the computer base" puts the controller and inductor (140, 150 in Fig. 1) next to each other. Acceleration and tilt sensors would not work to detect this position, and neither would a closure detector in the hinge 66 of Saarinen (see Fig. 6; no closure detector is seen in the reference, this is hypothetical)

**Conclusion.** Accordingly, the Applicant respectfully submits that claims 1-6 and 9-20 are not obvious in view of the cited references and respectfully requests withdrawal of the rejections under 35 U.S.C. § 103(a). Now that the rejections in the Office Action have been overcome, withdrawal of the rejections and expedited passage of the application to issue are respectfully requested.

The Applicant has thoroughly reviewed the art cited but not relied upon by the Examiner. Applicant has concluded that these references do not affect the patentability of the claims as currently presented.

Respectfully submitted,



Nick Bromer (Reg. No. 33,478)

(717) 426-1664

RABIN & BERDO, P.C.

CUSTOMER NO. 23995

Telephone: (202) 371-8976

May 16, 2006

Date

---

<sup>1</sup> As none is disclosed, the Examiner is seen to take Notice. This is traversed, and an actual reference disclosing the claimed sensors is requested.